

Abstract

A fluid that is useful in well completion operations comprises a viscoelastic surfactant (VES); a cosurfactant; and a high brine carrier fluid comprising an inorganic salt and having a density of at least 10 lb/gal. The VES preferably comprises a hydrophobic portion comprising an alkyl chain having 22 or fewer carbon atoms, and a hydrophilic portion that is nonionic or zwitterionic. Such a fluid retains its viscosity at high brine concentrations, and can include further components and additives. The fluid can be used as a drilling fluid, a fracturing fluid, or a gravel packing fluid.